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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,167	10/24/2001	Erica J. Pascal	50018A	4256
22847	7590	02/17/2004	EXAMINER	
SYNGENTA BIOTECHNOLOGY, INC. PATENT DEPARTMENT 3054 CORNWALLIS ROAD P.O. BOX 12257 RESEARCH TRIANGLE PARK, NC 27709-2257			MARVICH, MARIA	
		ART UNIT		PAPER NUMBER
		1636		
DATE MAILED: 02/17/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/087,167	PASCAL ET AL.
	Examiner Maria B Marvich, PhD	Art Unit 1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 19 November 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-97 is/are pending in the application.  
     4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) Claim(s) 15-17 is/are allowed.
- 6) Claim(s) 1,8,13,18-20,28,30-39,66,67,82,83,90 and 91 is/are rejected.
- 7) Claim(s) 2-7,9-12,14,21-27,29, 42,43,50,51,58,59,74 and 75 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) All    b) Some \*    c) None of:  
         1. Certified copies of the priority documents have been received.  
         2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
     a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                               | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                      | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

Continuation of Disposition of Claims: Claims withdrawn from consideration are 40,41,44-49,52-57,60-65,68-73,76-81,84-89 and 92-97.

**DETAILED ACTION**

This office action is in response to a Response to Restriction requirement filed 11/19/03. The IDS papers filed 10/28/02 and 11/3/03 have been identified and the documents considered. The signed and initialed PTO Form 1449s has been mailed with this action. Applicants have elected Group I (Claims 1-39, 42-43, 50-51, 58-59, 66-67, 74-75, 82-83 and 90-91) without traverse. The species election filed 7/1/03 has been withdrawn.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 18-20 and 66-67 are rejected under 35 U.S.C. 102(e) as being anticipated by Palli et al, US 2002/0119521 A1, see entire document.

Palli et al teach construction of a novel ecdysone receptor based inducible gene expression system in which chimeric ecdysone receptors are expressed from promoters on plasmids or vectors (see e.g. paragraph 0123). Figures 4 and 7 teach a chimeric receptor comprising an activation domain such as from VP16 and the DNA binding, hinge and ligand binding domains from *Drosophila melanogaster* ecdysone receptor. Also contemplated for use in the chimeric receptor is the DNA binding, hinge and ligand binding domains from *Manduca Sexta* and *Chironomus tentans* (see e.g. 0198).

Claims 1, 30-39, 82-83 and 90-91 are rejected under 35 U.S.C. 102(e) as being anticipated by Jepson et al, US 6,379,945 B1, see entire document.

Jepsen et al teach methods of gene switching to generate chimeric insect receptor proteins. Jepsen et al teach construction of a chimeric receptor in which the glucocorticoid receptor transactivation domain and DNA binding domain are fused to the hinge and ligand-binding domain from *Drosophila melanogaster* or *Heliothis virescens*. Next, the ligand-binding domain of this receptor is swapped for that of *Spodoptera exigua* ligand binding domain. These insects are of the *Lepidoptera* order. The chimeric receptor sequences were cloned into vectors such as pSK or pBluescript and plant host cells were transformed to generate transgenic tobacco plants and seedlings as ( see e.g. column 25, line 50 to column 26, line 44 and column 26, line 47-55).

Claims 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Albertsen et al, US 6,504,082 B1 see entire document. .

Albertsen et al teach chimeric receptor proteins in which one or more of the ligand binding, DNA binding or transactivation domains are obtained from a heterologous source from the domains present in the chimeric receptor (see e.g. column 4, line 38-43). The receptors are expressed in expression vectors driven by a promoter (see e.g. column 15, line 47-66). Cells transformed with the vectors are grown for the generation of transgenic plants and seeds (see e.g. column 20, line 51-62). In the chimeric receptors taught, the transactivation domain and DNA binding domains of *Ostrinia nubilalis* are replaced with that of VP16 or C1 transactivation domain and Gal4 or LexA DNA binding domains (see e.g. column 23, line 19-28).

### ***Conclusion***

Claims 1, 8, 13, 18-20, 28, 30-39, 66-67, 82-83 and 90-91 are rejected.

Claims 2-7, 9-12, 14, 21-27, 29, 42-43, 50-51, 58-59 and 74-75 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 15-17 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria B Marvich, PhD whose telephone number is (703) 605-1207. The examiner can normally be reached on M-F (6:30-3:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel, PhD can be reached on (703) 305-1998. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Maria B Marvich, PhD  
Examiner  
Art Unit 1636

January 21, 2004

*A. Leffers Jr.*  
**GERRY LEFFERS**  
**PRIMARY EXAMINER**